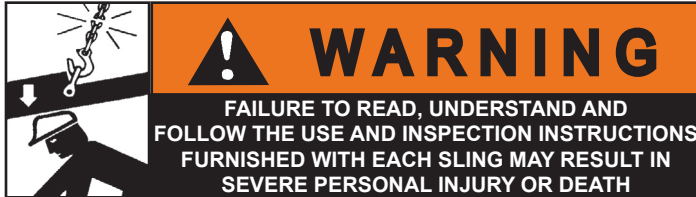


## LiftAlloy™ Chain Slings

### USE, CARE AND INSPECTION REQUIREMENTS



Upon receipt, make certain that it meets the requirements of your Purchase Order and that it has not been damaged in shipment.

#### ALWAYS INSPECT SLINGS BEFORE EACH USE

##### INSPECTION

Remove Chain Slings from service if any of the following are visible:

- A. A rated capacity tag is missing or illegible.
- B. Knots in any part of the sling.
- C. Any evidence of heat or chemical damage, including melting or discoloration.
- D. Metal fittings or chain that is cracked, nicked, gouged, stretched, deformed, pitted, corroded, excessively worn, or has weld spatter.
- E. Hooks with throat openings increased by more than 15 percent or twisted out of plane more than 10 degrees.
- F. Latches on hooks should hinge freely and seat properly.
- G. Chain links and attachments should hinge freely with adjacent links.
- H. Any other visible damage which causes doubt as to the sling strength.

##### OPERATING PRACTICES

- A. Slings shall not be loaded in excess of the rated capacity. Consideration shall be given to the effect of angles. (See Effect of Angle Chart shown on opposite side.)
- B. Select slings having suitable characteristics for the type of load, hitch and environment. (See Lift-All Catalog)
- C. Slings shall not be shortened by twisting, knotting or other unapproved methods.
- D. Slings shall not be lengthened by knotting, choking or basketing slings together, or by any other unapproved method. Suitable fittings must interconnect slings.
- E. Slings shall be hitched in a manner providing control of the load.
- F. Chain slings should be protected from being cut or damaged by corners, edges, protrusions or abrasive surfaces. See Sling Protection section of Lift-All Catalog.
- G. Keep all portions of the human body from between the sling and the load, and from between the sling and the lifting hook.
- H. Personnel should stand clear of the suspended load.
- I. Personnel shall not ride the sling or a load suspended by a sling.
- J. Shock loading shall be avoided.
- K. Slings should not be pulled from under a load when the load is resting on them. Where practicable, use blocking to allow for easy sling removal.
- L. Twisting and kinking slings shall be avoided.
- M. Loads applied to a hook should be centered in the base of the hook to prevent point loading of the hook.
- N. Before lifting, make certain that the sling, attachments, or load shall not snag. Personnel shall be continuously alert to avoid snagging or bumping.
- O. In a basket hitch, proper slings must be selected to balance the load and restrict slippage in order to prevent the load from falling out of the sling.
- P. In a choker hitch, slings shall be long enough so that the choker fitting chokes onto the sling eye or body and never onto any fittings.
- Q. Slings should be stored in an area where they will not be subject to mechanical damage, moisture or extreme heat.

- R. Do not expose slings to chemicals that are not compatible with all of the sling materials. (See the Lift-All Catalog.)
- S. Slings should not be used at angles of less than 30 degrees from horizontal.
- T. Slings should not be dragged on the floor or over an abrasive surface.
- U. When lifting points are below the center of gravity, loads tend to be unstable. Proper rigging must restrict load rotation to avoid tipping and loss of load control.
- V. For lifts of nonsymmetrical loads using multiple sling legs, an analysis should be performed by a qualified person to prevent the overloading of any leg.
- W. The Working Load Limit for Chain Slings used in a heated environment shall be reduced as follows.

Temperature of Chain (°F)	% Reduction in Rated Capacity while heated		Permanent Reduction of Rated Capacity		Temperature of Chain (°F)	% Reduction in Rated Capacity while heated		Permanent Reduction of Rated Capacity	
	Grade 80	Grade 100	Grade 80	Grade 100		Grade 80	Grade 100	Grade 80	Grade 100
Below -40	Do Not Use	Do Not Use	Do Not Use	Do Not Use	700	30	40	10	20
					800	40	50	15	25
400	10	15	0	0	900	50	60	20	30
500	15	25	0	5	1000	60	70	25	35
600	20	30	5	15	Over 1000	Remove from Service			

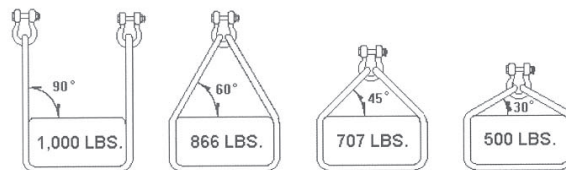
Refer to other regulations, codes and standards for additional information and safe operating practices. See OSHA CFR 1910.184 Regulations, Lift-All Catalog, ANSI/ASME B30.9.

#### Effect of Angle

When slings are used at an angle, (i.e., two slings, or one sling in a basket hitch, attached to only one crane hook) sling capacity is reduced. How much it is reduced depends on the degree of the angle. You can determine whether a sling will be rated high enough if you know the angle between the sling leg and the horizontal. Once you know this angle, multiply the sling's rating by the appropriate factor in the table. This will give you the sling's reduced rating.

ANGLE	FACTOR	ANGLE	FACTOR	ANGLE	FACTOR
90°	1.00	65°	.906	40°	.643
85°	.996	60°	.866	35°	.574
80°	.985	55°	.819	30°	.500
75°	.966	50°	.766		
70°	.940	45°	.707		

SLING CAPACITY DECREASES AS THE ANGLE DECREASES



A sling capable of lifting 1,000 lbs. in a 90° vertical basket hitch can only lift 866 lbs. at a 60° angle, 707 lbs. at a 45° angle, and 500 lbs. at a 30° angle.

Call for information on Sling Inspections & Safety Seminars

Directed Toll Free (800) 909-1964

